

**REMARKS**

*Summary Of The Office Action & Formalities*

Claims 1-23 are all the claims pending in the application.

The prior art rejections are summarized as follows:

1. Claims 1-3, 5, 6, 8, 11, 14, 15 and 18-21 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kar et al. (USP 4,531,959).

2. Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kar et al. (USP 4,531,959) in view of Guillemette et al.

Claims 9, 10, 12, 13, 16, 17, 22, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form, including the limitations of the base and any intervening claim.

Applicants respectfully traverse the prior art rejections.

*Claim Rejections - 35 U.S.C. § 103*

In rejecting claims 1-3, 5, 6, 8, 11, 14, 15 and 18-21 in view of Kar et al. (USP 4,531,959), the Examiner essentially reiterates the grounds of rejection set forth in the Office Action of April 22, 2003.

In support of the patentability of claims 1, 11, 14, and 18, Applicant argued in the Amendment of July 22, 2003 that Kar et al. fails to teach or even suggest the entry die support and grid as a one-piece integral construction, and that there is no teaching or suggestion to extend the sleeve 63 to form such a structure in order to facilitate alignment as alleged in the grounds of rejection. Applicant set forth several bases in support of this position.

Responding to Applicant's arguments, the Examiner *first* takes the following position:

Applicant's argument of the non-obviousness of modifying the Kar et al apparatus such that the sleeve is extended upstream of the grid to accommodate the guide die or entry die since it would complicate cleaning of the assembly is found to be non-persuasive. If one desires to reduce time spent in aligning the longitudinal axis of the entry die and exit die, it would have been obvious to extend the Kar et al 63 sleeve upstream of the grid so as to accommodate the entry or guide die.

Office Action at page 5. Applicant respectfully disagrees.

There is absolutely no teaching or suggestion in Kar et al. regarding any alleged time saved in aligning the longitudinal axis of the entry die and exit die by extending the sleeve upstream. To the contrary, if anything, Kar et al. would lead one skilled in the art away from such a modification, since the reference explicitly touts the benefits of the embodiment of Fig 2 of the reference, which "can be easily cleaned since it is readily disassembled." Therefore, one skilled in the art would not think of extending the sleeve in the upstream direction to accommodate the entry die therein.

Moreover, since Kar et al. is entirely silent with respect to extending the sleeve upstream of the grid, the reference cannot be relied upon as making any kind of comparison between the *alleged* time saving benefits in aligning the longitudinal axis of the entry die and the *actually disclosed* cleaning benefits that encourage one to adopt the embodiment of Fig. 2, at least with respect to the entry die. Accordingly, the Examiner's rationale finds no basis in the disclosure of the applied art.

Furthermore, as Applicant argued in the last response, in the embodiment of Fig. 6, both the bottom end of the sizing die 38 and the sleeve 63 must rest on a shoulder or flange within the coater so as to prevent their axial downward displacement. On the other hand, if the upper guide die were sized to fit within the sleeve at the top, it would tend to displace axially downward *within the sleeve* and block the feed holes 40, since there is no disclosed structure for stopping the guide die's axial displacement *within the sleeve*. Clearly, therefore, the asserted modification would not have been obvious or desirable. Rather, at most, one skilled in the art would take away from Kar et al. the idea of placing *only the bottom sizing die within the sleeve*.

The Examiner responds to this position as follows:

Applicants argument of the non-obviousness of modifying the Kar et al. apparatus such that the sleeve is extended upstream of the grid to accommodate the guide die or entry due to possible axial displacement of the entry die is found to be non-persuasive since Kar et al as modified with the Guillemette et al. hollow screw would have prevented axial displacement of the entry die.

Office Action at page 5. Applicant respectfully disagrees.

First, the Examiner reliance on Guillemette et al. with respect to the independent claims is new, since the last office action rejected these claims in view of only Kar et al. Accordingly, the Examiner should withdraw the finality of the present rejection, since the independent claims were not amended in the last Amendment of July 22, 2003.

Second, the Examiner has not explained *how* the hollow screw of Guillemette et al. would cooperated with a modified coating apparatus, which includes the sleeve of Fig. 6 of Kar et al. and that is further modified by extending the upper portion to accommodate the entry die.

These modifications are not rooted in any actual disclosure, but are conveniently arrived at by selectively lifting disparate features from different embodiments and different references to arrive at Applicant's claimed invention, while all the time relying on Applicant's own disclosure as an instruction manual for carrying out this hypothetical exercise.

Third, the Examiner apparently misunderstands Applicant's argument with respect to displacement of the dies. Applicant argued that, in the embodiment of Fig. 6, both the bottom end of the sizing die and the sleeve must rest on a shoulder or flange within the coater so as to prevent their axial downward displacement. On the other hand, if the upper guide die were sized to fit within the sleeve at the top, it would tend to displace axially downward *within the sleeve* and block the feed holes 40, since there is no disclosed structure for stopping the guide die's axial displacement. The addition of a hollow screw that applies a compression force on the sleeve (or even the die) will not prevent downward axial displacement of the entry die (i.e., displacement further within the sleeve).

The Examiner argues in the alternative as follows:

Alternatively, Kar et al column 6 lines 26-27 teaches it is possible to fabricate ***the sizing die or entry die as a unitary structure*** if one wants to prevent axial displacement of the dies. Therefore, it would have been obvious to extend Kar et al. sleeve 63 upstream to accommodate the entry or guide die and assemble or fabricate the entry die/sleeve/exit die as a unitary structure since Kar et al teaches the possibility of fabricating or assembling together the exit die and sleeve as a unitary structure and obvious to assemble or fabricate the entry die/sleeve/exit die as a unitary structure to facilitate in installing the entry die/grid/exit die in the optical coating apparatus.

Office Action at pages 5-6. Again, Applicant respectfully disagrees.

First, the Examiner inaccurately describes the disclosure of Kar et al. The reference states that it may be possible “to fabricate the sizing die and the flow distribution sleeve as a unitary structure.” Kar et al. at column 6, lines 26-27. Therefore, Kar et al. is still silent about any modifications to the entry die, let alone making it a unitary structure with the sleeve. Additionally, even if one were to make the entry die and the sleeve a unitary structure (i.e., one piece), then this structure clearly would not meet the requirement for a separate entry die disposed in the die support as recited in claims 1, 11, and 18. Indeed, there would no longer be a requirement for a die support with receivers recited in claim 14. In effect, the Examiner’s hypothetical modification here, aside from not being rooted in any prior art disclosure, would still not meet all the limitations of the pending claims.

Clearly, therefore, the asserted modification would not have been obvious or desirable. Rather, at most, one skilled in the art would take away from Kar et al. the notion of placing *only the bottom sizing die within the sleeve*.

The Examiner responds as follows to Applicant’s arguments in support of claims 2, 5, 8, 15, and 18:

Applicant's argument that there is no disclosure for making an additional modification of expanding the inside diameter of the flow distribution chamber at the upstream end so its diameter is greater than the grid is found to be non-persuasive. Kar et al. in Figures 2 and 5 show the opposite ends of the sleeve or grid are enlarged as defined with a radial wall extending so as to form a flange. Kar et al. teaches the flange or enlarged opposite ends of the grid or sleeve are needed to space the grid or sleeve from the housing and form the inner flow chamber. Therefore, if one desires to use one of Kar et al coating applicators which do not have a flow chamber or annular chamber which is formed within the housing, it would have been obvious given the modifications of

the Kar et al. sleeve with an upstream and downstream part to enlarge the upstream and downstream part for respectively the entry and exit die such that the upstream and downstream part has an outer diameter larger than outer diameter of the grid to enable one to form an annular flow chamber between the upstream and downstream part thereby enabling one to insert the die support in the housing which does not have annular flow chamber formed in the housing for the taught advantages of an integral die support and grid-facilitate alignment of precise alignment of the longitudinal axes of the grid with a die.

Office Action at page 6. Applicants respectfully disagree.

Once again, the Examiner is piecing together multiple suppositions without pointing to any disclosure that would have guided the skilled artisan. Rather, the Examiner is relying on improper hindsight using Applicant's disclosure to reconstruct Applicant's invention. In fact, as argued in Applicant's last response, when taken as a whole, the disclosure in Kar et al. would have led away from the alleged modification asserted by the Examiner. Applicant's arguments bear repeating herein.

Applicants and the Examiner are in agreement that none of the embodiments of Kar et al. discloses housing the die-support whose diameter is greater than the inside diameter of the grid, while also having the die-support and the grid as an integral one-piece construction. In the embodiment of Fig. 2, the guide die is disposed in a bore of the housing 30 having a diameter larger than that of the flow distribution sleeve. On the other hand, the bore 32 is sized to match the outer flange diameter of the flow distribution sleeve 39 and the outer diameter of the sizing die 38. Given this structure and the disclosure of the alternative embodiment of Fig. 6, one skilled in the art would understand that the flow distribution sleeve 39 could be extended to accommodate the sizing die therein (as shown in Fig. 6). However, as noted above with respect

to the independent claims, there is no disclosure for extending the upstream portion of the flow distribution sleeve to accommodate the guide die 42.

Moreover, there is no disclosure for making the additional modification of expanding the *inside* diameter of the flow distribution sleeve at the upstream end so that its diameter is greater than that of the grid. The Examiner points to the flanges 41 to argue that Kar et al. discloses the need to create an annular cavity around the grid. However, these flanges do not enlarge the *inside* diameter of the sleeve to create a “*housing* of the die-support whose diameter is greater than the inside diameter of the grid,” as recited in claims 2 and 5, for example.

*To the contrary, in all the embodiments, the flow distribution sleeve 39 has a uniform inside diameter, even in the embodiment of Fig. 6 in which the sizing die is placed within an extension of the sleeve.* There is no disclosed rationale for incurring added manufacturing costs to expand the flow distribution sleeve at the upstream end, since this would defeat any alleged benefit of placing the guide die within the flow distribution sleeve. Rather, the modification would entail costly re-manufacturing of a flow distribution sleeve that expands and presses against the inside face of the expanded bore 31 shown in Fig. 2. Such redundancy would serve no apparent purpose, and result in a complex and expensive structure.

Last, with respect to claims 3, 6, and 19, the Examiner responds as follows:

Applicant's argument that Kar et al fails to teach that the first and second radial wall oppose each other to define an annular chamber therebetween is found to be non-persuasive. Kar et al in Figures 2 and 5 show the opposite ends of the sleeve or grid are enlarged. Kar et al. shows the enlargement at each end of the grid or sleeve as being defined by a radially extending wall which forms a flange at each end. Kar et al teaches the flange or enlarged

opposite ends of the grid or sleeve are needed to space the grid or sleeve from the housing and form the inner flow chamber. Therefore, if one desires to use one of Kar et al coating applicators which do not have a flow chamber or annular chamber which is formed within the housing, it would have been obvious given the modifications of the Kar et al sleeve with an upstream and downstream part to enlarge the upstream and downstream part for respectively the entry and exit die such that the upstream and downstream part each with a radially extending wall/flange has an outer diameter larger than outer diameter of the grid to enable one to form an annular flow chamber between the opposing radially extending wall of the enlarged upstream and downstream part thereby enabling one to insert the die support in die housing which does not have annual flow chamber formed in the housing for the taught advantages of an integral die support and grid-facilitate alignment of precise alignment of the longitudinal axes of the grid with a die.

Office Action at page 7. Applicant disagrees.

Once again, the Examiner's rationale is not rooted in any prior art disclosure and, in fact, goes against the teaching of Kar et al. Kar et al. disclose the use of flanges 41 as a way of enlarging the annular space around the sleeve. The reference, thus, would teach away from resizing a portion of the *interior diameter of the sleeve to define an annular space between the radial walls that form part of the receiving portions for the entry and exit dies*. There is simply no support for the Examiner's alleged modification.

The Examiner is kindly requested to carefully review Applicant's foregoing arguments, as well as those set forth in the previous response and reconsider the rejection of claims 1-4, 5- 8, 11, 14, 15 and 18-21. In reconsidering this rejection, the Examiner should keep in mind the requirement to satisfy the ***rigorous standard*** set forth by the Federal Circuit when trying to show that an invention would have been obvious in view of the combination of two or more references



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or a combination (or modification) of separate disclosures within a single reference. See, In Lee, USPQ2d 1430, 1433 (Fed. Cir. 2002), citing, e.g., In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) ("Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine [or modify] prior art references.").

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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